JOB CHARACTERISTICS OF SHIPBOARD INDEPENDENT DUTY HOSPITAL CORPSMEN

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JOB CHARACTERISTICS OF SHIPBOARD INDEPENDENT DUTY HOSPITAL CORPSMEN

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SUMMARY

Although shipboard independent duty hospital corpsmen (IDC) play a critical role as the senior medical department representatives aboard the majority of U.S. Navy ships, relatively little is known about the nature and scope of their tasks. Data from the Navy-wide (N = 330) administration of a 7-day work diary indicated an average 59 hour workweek in port and an 85 hour workweek at sea. Length of workweek was associated with ship type, operational tempo, and IDC paygrade. Administrative duties accounted for the greatest proportion of the workweek (53%), with direct patient care (21%) and organizational requirements (26%) distributed about evenly. Specific IDC duties at sea differed somewhat between submarines and surface ships. Job satisfaction was found to be inversely related to the proportion of time required for administrative duties at sea ($p < .01$). Results are discussed in terms of the standard Navy workweek.

INTRODUCTION

Within the Navy health care system, the shipboard independent duty hospital corpsman (IDC) often serves as the primary provider of health care services. Unlike many non-physician health care providers, the shipboard IDC functions with a great deal of autonomy and assumes a relatively broad range of medical responsibilities. These medical responsibilities include the health of the crew; sanitation of the command; care of the sick and injured; procurement, storage, and custody of medical department property; preparation of required medical reports; and maintenance of health records.[1]

In the private sector, the duties of non-physician health care providers are influenced by the scope of the practice, the functional relationship with other auxiliary health workers, and the nature of the tasks delegated to them.[2] Through this delegation process, non-physician health care providers often serve as a "buffer" for the primary care physician[2-5] and may become more involved in patient examination and less involved in patient instruction, treatment planning, and administrative tasks.[6]

Aboard the majority of U.S. Navy ships, however, there is no physician assigned, and the IDC must distribute his activities to meet a variety of medical, public health, administrative, and occupational health requirements. Within recent years, for example, the implementation of the Navy Occupational Safety and Health Program[7] has dramatically increased shipboard medical department responsibilities in the area of occupational health. Additional shipboard medical department responsibilities have accrued through the radiation health program, the quality assurance program, and a host of collateral duty assignments.

While these, and other, public health and preventive medicine requirements have extended the shipboard IDC duties well beyond the delivery of primary health care, there has been no systematic attempt to document the specific nature of the shipboard medical department functions and to identify the temporal distribution of IDC activities. This documentation would provide important information regarding a number of training, tasking, and organizational outcome issues associated with the shipboard IDC community. A careful analysis of these activities may also have implications for the delivery of health care in (a) geographically remote regions where public health issues may fall within the aegis of a non-physician health care provider, or (b) industrial settings in which occupational and environmental health issues must be integrated with the duties associated with primary health care delivery.

The purpose of this investigation was to define the length and scope of the workweek of shipboard IDCs and relate these parameters to measures of job satisfaction. Although both physicians and non-physician health care providers in the shorebased community engage primarily in activities related to direct patient care,[2-6] it is hypothesized that shipboard IDCs spend significantly more time performing administrative duties, such as occupational health and record keeping, than they spend providing direct patient care.

In addition, it is hypothesized that the proportion of time spent on administrative tasks is inversely related to the level of job satisfaction. This hypothesis is based on the finding that corpsmen assigned to ships with physicians were less satisfied if their role was administrative support rather than patient care or technical support.[8]

METHODS

SUBJECTS

The initial sample in this Navy-wide study included all shipboard independent duty hospital corpsmen serving as senior medical department representatives (N=415). A total of 330 (80%) IDCs responded to the survey. The mean age of the IDC respondents was 34 years and paygrade was approximately evenly distributed between E-6 and E-7.

MEASURES

The measures used in this study represent a subset of a larger protocol administered during two separate mail-outs. General demographic and background information was also collected.

Job Satisfaction. The job satisfaction scale consisted of 20 items which approximated a number of the dimensions of physician job satisfaction identified by Lichtenstein.[9] The response alternatives for each item consisted of a 5-point Likert-type scale which ranged from very dissatisfied (1) to very satisfied (5).

Work Diary. The Task Analysis method was considered to document work related activities, but this method has been found to lack validity in health care settings.[10] Because work diaries have been used successfully in both the health care industry[6] and in the military,[11-12] this approach was selected. The work diary was presented in a seven page booklet with the day of the week, Monday through Sunday, identified at the top of the page. Each page consisted of a series of time blocks which divided the 24 hour clock into 1/2 hour segments. In each 1/2 hour time block the IDC was instructed to enter one or two work codes that best reflected his activity during that period. The work codes included six

Administrative Duties (Clerical, Reports, Occupational/Radiation Health, Training received, Training provided, and Other); four Direct Patient Care Duties (Treatment, Surgical, Advise, Other); seven Organizational Requirements (Collateral Duty, Working Party, Watch Standing, Inspection, Meetings, All Hands Evolution, Other); Off Duty; and Sleep. In addition, the IDC indicated whether the ship was in port or at sea on each day.

RESULTS

The analyses in this section were conducted to examine the factors associated with the length of the IDC workweek, identify the distribution of IDC tasks, and explore the relationship between IDC tasks and job satisfaction. An initial examination of the work diaries indicated that some of the diaries were incomplete. Therefore only those diaries which had fewer than six hours of missing data (4 percent) for the entire week were included in the analyses. This procedure reduced the sample size to 253.

IDC WORKWEEK

Length of workweek was computed by summing all 1/2 hour time blocks in which any of the 17 work-related activities (6 Administrative, 4 Direct Patient Care, 7 Organizational Requirements) were reported during the 7-day period. Using this procedure, the average workweek for IDCs was computed to be 69.3 hours.

A second set of analyses was performed to determine the relationship between a set of predictor variables and the length of workweek criterion. As shown in Table 1, the potential predictors included a number of background, organizational, and operational factors. Point biserial correlations between this set of predictor variables and the length of workweek indicated that the set of operational variables was most strongly associated with length of workweek. In order to determine the unique contribution of each operational variable, they were entered into a stepwise multiple regression analysis.** The results of this analysis

**Dichotomous nominal variables such as underway status (at sea, in port) were entered as dummy variables. Multiple category nominal variables such as ship class were dichotomized at each level and entered hierarchically as a single, composite factor.

TABLE 1

POINT-BISERIAL CORRELATIONS BETWEEN SELECTED BACKGROUND, ORGANIZATIONAL AND OPERATIONAL VARIABLES AND LENGTH OF WORKWEEK (N=253)

	LENGTH OF WORKWEEK (r_{pb})
BACKGROUND	
- Paygrade (First Class = 0; Chief = 1)	-.16**
- Number of Months Aboard Ship as Senior Medical Department Representative+	-.05
ORGANIZATIONAL	
- Number of Medical Department Assistants+	-.04
- IDC Special Warfare Qualified (No = 0; Yes = 1)	-.05
OPERATIONAL	
- Fleet (Pacific = 0; Atlantic = 1)	.04
- Ship Class	
AE/AO (No = 0; Yes = 1)	.05
CG (No = 0; Yes = 1)	-.07
DD/DDG (No = 0; Yes = 1)	.06
FF/FFG (No = 0; Yes = 1)	-.05
LSD/LST (No = 0; Yes = 1)	-.03*
MSO (No = 0; Yes = 1)	-.11*
SSN/SSBN (No = 0; Yes = 1)	.12*
- Underway Status (In Port = 0; At Sea = 1)	.52***
- Operating Status	
Local Operations (No = 0; Yes = 1)	-.13*
Pre-Deployment (No = 0; Yes = 1)	.01***
Deployed (No = 0; Yes = 1)	.37***
Standdown (No = 0; Yes = 1)	-.29***

* p < .05
** p < .01
*** p < .001
\+ Pearson product moment correlations

indicated that underway status (at sea, in port), ship class, and operating status (local operations, pre-deployment, deployed, standdown), were significantly associated with length of workweek and produced a multiple R of .59 (Table 2). The underway status of the ship was the primary factor associated with length of workweek. As shown in Figure 1, the average workweek at sea (85 hours) was substantially longer than the average workweek in port (59 hours).

TABLE 2

STEPWISE MULTIPLE REGRESSION ANALYSIS OF OPERATIONAL VARIABLES WITH LENGTH OF WORKWEEK

Variable	Multiple R	R^2	t	p
Underway Status	.52	.27	9.61	.001
Ship Class	.57	.32	4.08	.001
Operational Status	.59	.35	3.58	.01

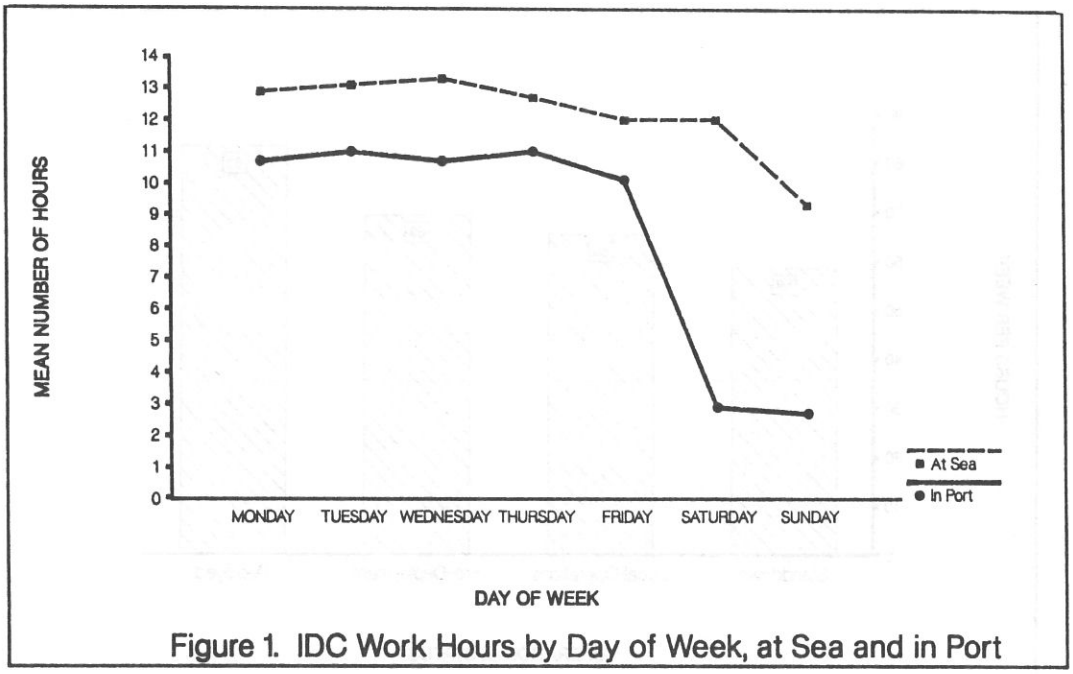


Figure 1. IDC Work Hours by Day of Week, at Sea and in Port

After the effects of underway status were removed from the equation, the remaining operational variables demonstrated modest, but significant, associations with length of workweek. As shown in Figure 2, the longest workweeks were registered aboard submarines, AEs, and DDs. The operational status of the ship was also significantly associated with length of workweek. As shown in Figure 3, the length of workweek increased as the tempo of operations increased from standdown through deployment.

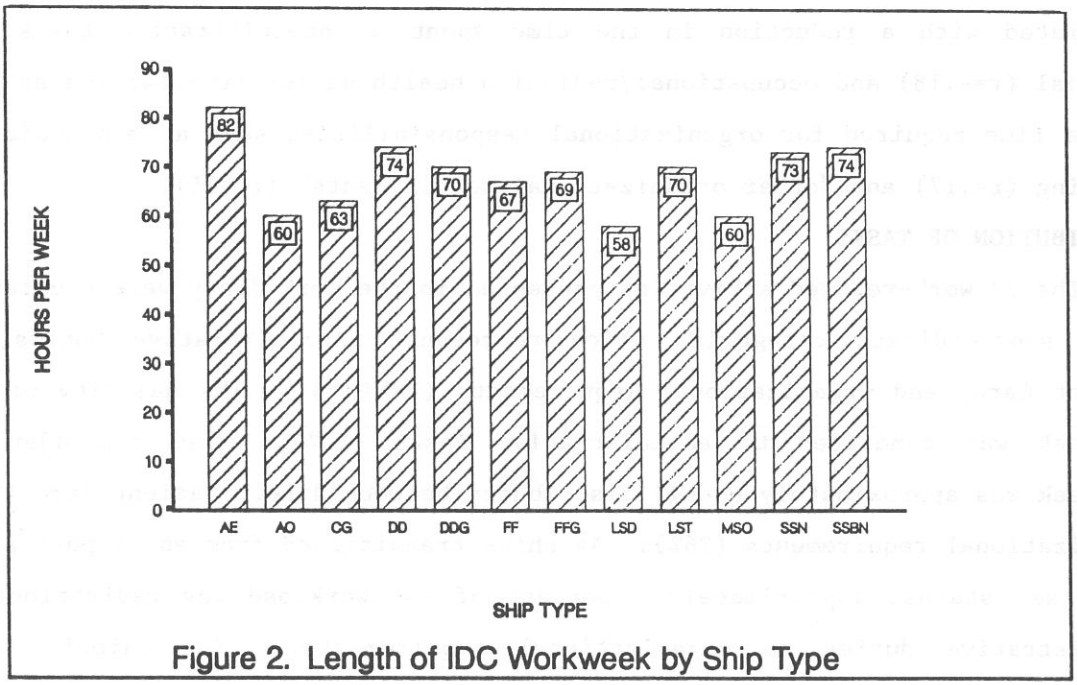


Figure 2. Length of IDC Workweek by Ship Type

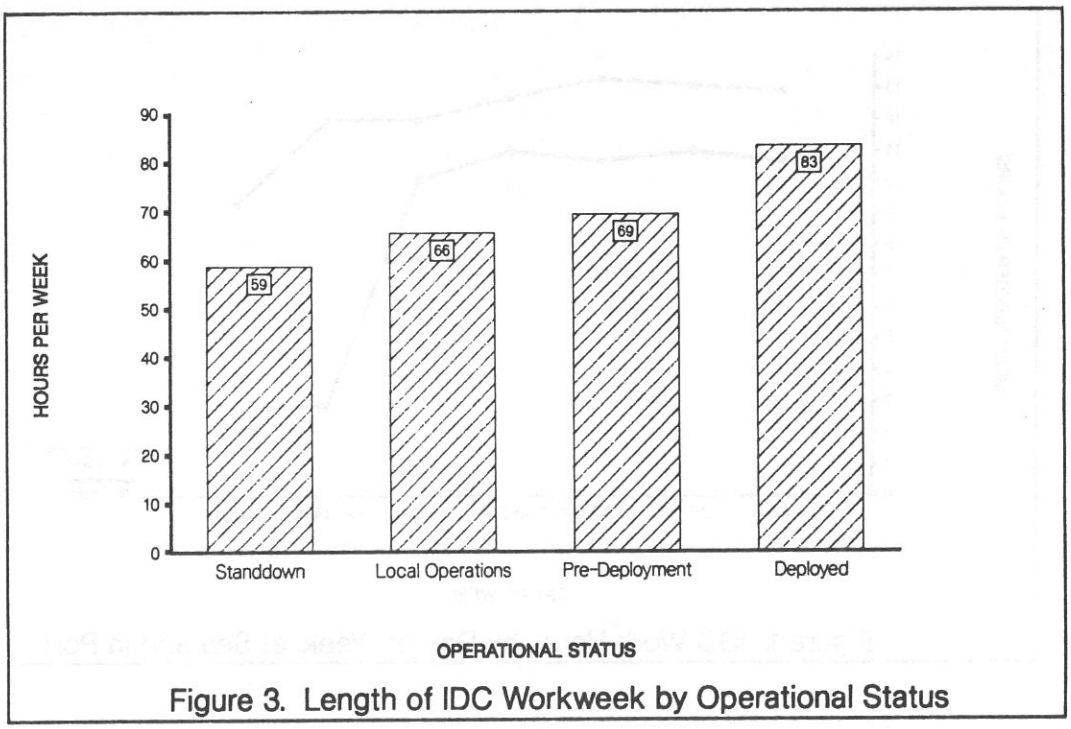


Figure 3. Length of IDC Workweek by Operational Status

In addition to the operational factors, the paygrade of the IDC was modestly, but significantly, associated with length of workweek. Overall, First Class Petty Officers worked longer workweeks (73.4 hours per week) than Chief Petty Officers (66.7 hours per week). It was interesting to note that the number of months aboard the ship as the Senior Medical Department Representative was not significantly associated with a reduction in the length of the workweek. A more detailed examination of the data indicated that the number of months aboard the ship was associated with a reduction in the time spent on administrative tasks such as clerical (r=-.18) and occupational/radiation health duties (r=-.14) and an increase in the time required for organizational responsibilities such as non-medical watch standing (r=.17) and "other organizational requirements" (r=.15).

DISTRIBUTION OF TASKS

The 17 work-related activities presented in the work diary were clustered into three superordinate categories which represented Administrative Duties, Direct Patient Care, and Organizational Requirements (Table 3). The majority of the IDC workweek was committed to administrative tasks (53%). The remainder of the workweek was approximately evenly distributed between direct patient care (21%) and organizational requirements (26%). As ships transitioned from an in port status to an at sea status, approximately 7 percent of the workload was redistributed from administrative duties to organizational requirements. The majority of this

redistribution was accounted for by a 4 percent reduction in "other administrative duties" (e.g. supply, fiscal) and a 7 percent increase in "all hands evolution /drill" as the ships went to sea.

TABLE 3

PERCENT OF WORKWEEK SPENT ON EACH OF THE SEVENTEEN JOB ACTIVITIES DURING IN PORT AND AT SEA PERIODS

ACTIVITY	IN PORT (N=146) MEAN %	AT SEA (N=184) MEAN %
ADMINISTRATIVE		
Clerical (logs, records)	12.34	12.36
Reports	6.68	5.28
Occupational, environmental, or RAD health duties	11.32	9.43
Training (receive)	2.07	1.90
Training (provide)	2.59	4.02
Other admin. duties	22.03	17.76
TOTAL ADMINISTRATIVE	**57.03**	**50.75**
DIRECT PATIENT CARE		
Treat injuries/illness	14.11	14.08
Surgical procedures	.31	.64
Advise/counsel	3.38	2.79
Other direct patient care	3.46	3.13
TOTAL DIRECT PATIENT CARE	**21.26**	**20.64**
ORGANIZATIONAL REQUIREMENTS		
Collateral duty	4.37	4.06
Working party/detail/ field day	1.54	2.74
Watch standing (non-medical)	.54	2.06
Stand inspection (personnel/spaces)	.82	.40
Meetings/quarters/ indoctrination	7.04	5.49
All Hands evolution/drill	2.45	9.34
Other organizational requirement	4.96	4.51
TOTAL ORGANIZATIONAL REQ.	**21.72**	**28.60**

Separate Multivariate Analyses of Variance (MANOVA) were conducted to identify factors associated with the distribution of work activities during at sea and in port periods. In the analysis of the at sea data, independent variables were fleet (Atlantic, Pacific), ship class (AE/AO, CG, DD/DDG, FF/FFG, LST/LSD, MSO, SSN/SSBN), operating status (standdown, local operations, predeployment, deployed),

and IDC paygrade (First Class, Chief). The dependent variables were the percentage of the workweek involved in administrative duties, direct patient care, and organizational requirements.**

The results of this MANOVA indicated that only the main effect of ship class was significantly associated with the proportional distribution of work activities [(2,1 1/2,44)=71; Approximate $F(12,180)=2.86, p<.001$]. A multiple discriminant analysis (MDA) was then performed to define more precisely the relationship between the six*** levels of ship class and the seventeen types of work activities. This analysis yielded a significant one factor solution which indicated that the distribution of work activities could be optimally discriminated on the basis of submarines and surface ships (Table 4).

During at sea periods, IDCs aboard surface ships spent proportionally more time treating illnesses and injuries, providing training, and going to quarters, meetings or indoctrination. IDCs aboard submarines, on the other hand, spent proportionally more time on occupational, environmental or radiation health duties and standing non-medical watches.

A second MANOVA was computed on the in port data to determine the relationship between the set of independent variables (fleet, ship class, operating status, paygrade) and the distribution of work activities. In this analysis none of the main effects or interaction effects were significant.

IDC TASKS AND JOB SATISFACTION

The job satisfaction scale consisted of twenty items which were rated on a five point scale with verbal anchors of (1) very dissatisfied (2) dissatisfied (3) neutral (4) satisfied, and (5) very satisfied. Across all IDCs, the mean item response was 3.71.

** In order to avoid linear dependency among the dependent measures, the percentage of time spent on organizational requirements was not entered into the analysis. The entry of any two of the three dependent measures would produce the same result.

*** MSOs were excluded from the analysis because of insufficient N and high variance properties.

TABLE 4

MULTIPLE DISCRIMINANT ANALYSIS

OF DISTRIBUTION OF IDC WORKLOAD AT SEA

BY SHIP CLASS

TASK ADMINISTRATION	STANDARDIZED CANONICAL DISCRIMINANT FUNCTION COEFFICIENTS	SUBMARINES (% OF WORKWEEK) SSN/SSBN	SURFACE SHIPS (% OF WORKWEEK) AE/AO	CG	DD/DDG	FF/FFG	LST/LSD	F
Clerical (logs, records)	-.10							1.59
Reports	.28							1.45
Occupational, environmental, or RAD health duties	.73	19.5	5.8	7.8	7.6	6.1	4.6	14.84***
Training (receive)	-.23							2.12
Training (provide)	.31	1.9	6.0	3.8	5.6	4.0	3.4	3.08**
Other admin duties	.02							1.42
DIRECT PATIENT CARE								
Treat injuries/illness	.48	6.4	18.1	16.7	17.2	15.7	12.9	8.00***
Surgical procedures	.04							1.00
Advise/counsel	.01							.98
Other direct patient care	.24							.94
ORGANIZATIONAL REQUIREMENTS								
Collateral duty	-.06							2.02
Working party/detail/ field day	-.02							.81
Watch standing (non-medical)	-.48	7.6	.05	0	.18	1.10	0	3.53**
Stand inspection (personnel/spaces)	.05							.98
Meetings/quarters/ indoctrination	.27	2.0	7.4	7.8	6.1	5.7	8.1	6.75***
All Hands evolution/drill	.12							1.30
Other organizational requirement	--							.12

* p<.05
** p<.01
*** p<.001
Canonical R^2 =. 61, Wilks' Lambda = .24($\chi^2(80)=189;p<.001$)

A stepwise multiple regression analysis was computed to determine the relationship between IDC job satisfaction and ship class, fleet, IDC paygrade, total length of workweek, and the distribution of work activities. The distribution of work activities consisted of the percentage of the workweek spent on administrative duties, direct patient care, and organizational requirements during in port and at sea periods. In this analysis, the percentage of time spent on administrative duties at sea and the percentage of time spent on organizational requirements in port were the only factors which demonstrated a significant relationship with job satisfaction (R=.20,p<.01). The magnitude of this effect, however, was relatively small.

During at sea periods, the activity labeled "other administrative duties" was the component which contributed primarily to the negative relationship between administrative tasks and job satisfaction. During in port periods, "watch standing (non-medical)" and "other organizational requirements" were the specific activities which contributed most to the negative relationship between organizational requirements and job satisfaction.

Discussion

The results of this study indicated that the average workweek for shipboard IDCs was 85.2 hours at sea and 59.1 hours in port. These figures corresponded fairly closely with the results of a retrospective questionnaire survey of shipboard enlisted personnel conducted in 1977.[13] In that retrospective survey, the authors estimated a 91.8 hour workweek during Condition III (wartime steaming) and a 53.2 hour workweek in port. Although the present study was not designed to assess general manpower issues, the results appear to support previously identified discrepancies between the Standard Navy Workweek of 40 hours in port and 66 hours during Condition III steaming and the actual work activities of the fleet.[12,13] Given the critical implications for the size of the force the Navy may raise and maintain, a careful analysis and potential recalibration of the Standard Navy Workweek may be warranted.[12]

In the present study the length of the workweek was associated primarily with the operational demands of the ship. When the ships operated at sea rather than in port, for example, the length of the average 5-day workweek increased 19 percent or about 2 hours per day, and the amount of work on the weekend increased 208 percent or about 6 hours per day. Other operational factors such as the state of readiness of the ship and the ship type influenced the length of the IDC workweek to a somewhat lesser extent. The IDCs aboard ships experiencing a higher tempo of operations (e.g., predeployment, deployed) worked longer workweeks than IDCs aboard ships which were less active (standdown, local operations). In addition, the IDCs aboard AEs, submarines, and DDs, worked somewhat longer hours than IDCs aboard other types of ships. Although these factors demonstrated significant associations with length of workweek, the magnitude of the effect was relatively small.

Similarly, the seniority of the IDC demonstrated a significant, but relatively low magnitude, relationship with the length of workweek. After statistically controlling for shipboard operational factors, number of medical department assistants, and number of months aboard as the senior medical department representative, it was found that Chief Petty Officers generally worked fewer hours than First Class Petty Officers. These differences were probably due to the fact that Chief Petty Officers have a good deal of authority aboard ship and have considerable access to other Chief Petty Officers and Commissioned Officers. These factors serve to facilitate coordination between medical department requirements

and shipboard schedules, increase communication and cooperation between the medical department and other departments, and enhance compliance with medical department programs and procedures.

Although a number of operational factors demonstrated a significant association with the length of workweek, the distribution of work-related activities showed only limited variation. Compared with IDC duties in port, for example, the IDCs at sea generally spent a greater proportion of the workweek on organizational requirements, such as all hands evolution/drills, and less time on administrative duties. Similarly during at sea periods, the distribution of IDC work activities was somewhat different for submarines and surface ships. The IDCs aboard submarines, for example, engaged in more radiation health activities and stood more non-medical watches. The IDCs aboard surface ships, on the other hand, spent more time in direct patient care, providing training, and going to quarters, meetings, or indoctrination. These differences were believed to reflect many of the environmental and operational variations which exist between ships and submarines at sea.

While some systematic differences in the distribution of IDC work activities were identified, the majority of all IDC tasks were administrative. These duties included record keeping, occupational and radiation health program management, report generation, supply, fiscal management, and training. Considering the length of the IDC workweek and the relative importance of competing patient care activities, it would seem appropriate to consider methods to reduce or facilitate the administrative workload. Although any detailed discussion of these methods is clearly beyond the scope of the present report, it is believed that the introduction of a comprehensive, automated, shipboard medical information system could substantially reduce the administrative workload of IDCs in the fleet.[14]

A reduction in the administrative workload would make more time available for other activities, including off duty time, and could have a positive effect on job satisfaction. During at sea periods, the level of job satisfaction was inversely related to the proportion of the workweek committed to administrative duties. When ships were in port, on the other hand, job satisfaction was not significantly associated with administrative duties but demonstrated a negative relationship with organizational requirements.

These results may reflect differential IDC expectations during at sea and in port periods. When the ships are at sea, for example, the IDC provides direct patient care with a great deal of autonomy and plays an integral part in

maintaining the ship's operational capability and combat readiness. In this operational setting, many of the administrative duties may be viewed as incongruent with existing role expectations. During in port periods, on the other hand, the IDC refers a greater proportion of his patients to shorebased facilities,[15] and may place a higher priority on preparing for inspections and managing the shipboard medical department. In this context, shipboard organizational requirements, such as standing quarterdeck watches, may be viewed as inconsistent with management-oriented role expectations.

Although these interpretations of the relationships between job activities and job satisfaction are speculative, there is a good deal of evidence that job satisfaction among health care providers is adversely affected by an incongruence between role expectations and job demands.[8,16-17] The extent to which differential role expectations affect levels of job satisfaction during in port and at sea periods, however, remains an empirical issue for future research. Additional research efforts should address mechanisms, including automated medical information systems, to facilitate the administrative workload of shipboard IDCs and reduce the length of the IDC workweek.

REFERENCES

1. USN Manual of the Medical Department. (1984)

2. Ekwo E, Dusdieker LB, Fethke C, Daniels M. Physician's assistant in primary care practices: Delegation of tasks and physician supervisors. Publ Hlth Rep 94:340, 1979.

3. Crandell LA, Santulli WP, Radelet ML, et al. Physician assistants in primary care: Patient assignment and task delegation. Med Care 22(3):269, 1984.

4. Mendenhall RC, Rapicky PA, Neville RE. Assessing the utilization and productivity of nurse practioners and physician's assistants: Methodology and findings on productivity. Med Care 18(6):609, 1980.

5. Hein HA. The physician's assistant as a buffer in the delivery of primary care. J Iowa Med Soc 64:507, 1974.

6. Jacobs AR, Johnson KG, Breer P, Nelson EC. Comparison of tasks and activities in physician-medex practices. Publ Hlth Rep 89:339, 1974.

7. OPNAV Instruction 5100.23B of August 1983.

8. Booth RF, McNally MF. Individual characteristics, work assignments, and job satisfaction of Navy hospital corpsmen. NAVHLTHRSCHCEN, San Diego: Technical Report No. 81-6, 1981.

9. Lichtenstein R. Measuring the job satisfaction of physicians in organized settings. Med Care 22:56, 1984.

10. Nelson EC, Jacobs AR, Breer PE. A study of the validity of the task inventory method of job analysis. Med Care 13:104, 1975.

11. Asquith RH. The variability of work activities of Naval personnel derived from work diaries: Doctorial Dissertation: Purdue University, 1960.

12. Thomas PJ. The Navy workweek at selected commands in the U.S. and overseas. NPRDC, San Diego: Technical Report, 1986.

13. Williams HL, Bokesch WM, Malone JS. Investigation of Navy Workweeks: Summary Report. NPRDC, San Diego: Technical Report No. 77-15, 1977.

14. Helmkamp JC, Gunderson EKE, Parsons WM. Functional concepts for a shipboard medical information system. NAVHLTHRSHCEN, San Diego: Technical Report No. 84-48, 1984.

15. Nice DS, Conway SW. Patient referrals and consultations initiated by Pacific fleet ships during in port periods. Mil Med (in press).

16. Mathanson CA, Becker MH. Work satisfaction and performance of physicians in pediatric outpatient clinics. Health Serv Res 8:17, 1973.

17. Brief AP, Sell MV, Aldas RJ, Malone N. Anticipatory socialization and role stress among registered nurses. J Health Soc Behav 20:161, 1979.

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